Development funds dissolving in pulp

Should development banks and agencies finance the expansion of the pulp and paper sector?

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Uncredited photos courtesy of Merel van der Mark

The Puma mill (Brazil) rises over the surrounding eucalyptus plantations.

Klabin, the second biggest paper producer in Brazil, has announced that it has completed the financing for its Puma II project, which will add almost 0.9 million ton per year (mty) in capacity to its existing 1.6 mty Puma I mill, in Ortigueira, Paraná, Brazil. For this project, in total, the loans obtained represent around 80% of the estimated overall cost of the Puma II project (USD 2.2 billion). Klabin has captured USD 1.4 billion in loans from Brazil’s Development bank BNDES, the InterAmerican Development Bank (IDB), the International Finance Corporation (IFC), a sister organisation of the World Bank and member of the World Bank Group, and Finnvera, a Finnish state-owned financing company. In addition, a syndicate of 8 international commercial banks and another international entity (rumour has it that this could be JICA, Japan’s International Cooperation Agency), contributed with another USD 422 million.

In April 2019, Klabin had actually announced that it would pay for Puma II by itself, using “a combination of the cash position of the company and the cash generation of the recurring

1 Laboratório de Estudos do Espaço Antrópico da Universidade Estadual do Norte Fluminense
2 Klabin (16-4-2019), Material Fact.
3 Klabin (16-4-2019), Material Fact.
4 Klabin (6-11-2019), Notice to the Market - New funding for Project Puma II.
5 Klabin (31-10-2019), Notice to the Market - Project Puma II Funding.
6 IDB (31-12-2019), IDB Invest Leads $800 Million Financing to Klabin and Supports Growth and Improved Productivity of Brazil’s Pulp and Paper Industry. Additional banks are: Santander, China Cofinancing Fund, IFC MCPP, Rabobank, HSBC, Sumitomo Mitsui Banking Corporation, Credit Agricole, BNP Paribas, Sumitomo Mitsui Trust Bank and KEB Hana.
operations”. But it noted that “the funding structure may include debt if the conditions are attractive in terms of maturity and costs.” Apparently the conditions were very attractive.

The large share of finance from development banks and agencies raises a series of questions. Is it really the role of these institutions to finance this or any pulp mill, for that matter? The BNDES has been a large financier of Klabin’s competitors as well and the IDB is also financing a new pulp mill in Uruguay. Is the sector of such strategic national importance? Is it facing economic hardships and therefore in need of support, or is it very instrumental in achieving the Sustainable Development Goals (SDGs) and fighting climate change?

With this document, we have tried to address these issues and provide some clarifications.

About Klabin

Klabin was founded in 1899, in São Paulo, Brazil, by Lithuanian immigrants. It started as a paper producing company, but in 1934 it took a big step towards expansion. It acquired a large piece of land in the state of Paraná, the Fazenda Monte Alegre. The land was covered in forests, providing the essential resources for a future pulp mill. Twelve years later, Klabin inaugurated the country’s first integrated pulp and paper mill on site.

This project received strong support from then President Getúlio Vargas. The country was facing an economic crisis and support to national industries was part of the government’s strategy to overcome it. Vargas was also interested in developing a national pulp and paper industry to guarantee the supply of paper for newspapers as a new world war was looming and imports could be compromised. Therefore, he gave Klabin tax exemptions for the import of machinery, a loan for 50% of the total project costs at favourable conditions, the promise to build a railway and a guaranteed market.

Klabin not only built a mill, but it also created a company town around the mill, for its employees. Over the years, a second settlement grew on the other side of the river, made up of people who were attracted by the prospect of finding a job. This settlement gave rise to what is now the town of Telêmaco Borba.

Today, Klabin is Brazil’s largest paper producer, exporter and recycler and the country’s second largest pulp producer. It owns four pulp mills: the Correia Pinto Mill, the Otacílio Costa Mill, the Telêmaco Borba/Monte Alegre mill and the Puma mill, with a total pulp producing capacity of 3.1 million tonnes a year.

The Puma mill, the company’s largest with a capacity of 1.5 million tonnes per year, was inaugurated in 2016. It is located on the Tibagi river, 15 km downstream from the company’s Telêmaco Borba mill. In 2018 the company started to prepare for the development of a new mill, Puma II, on this site.

In April 2019, Klabin obtained an installation license for Puma II, without having completed an Environmental Impact Assessment. The company argues that this is not required as it is an expansion of an existing mill, even though Puma II will almost double the capacity of the complex and require approximately 100,000 hectares of eucalyptus and pine plantations. The Preliminary Environmental Impact Assessment was completed in 2018.
Report\textsuperscript{11} does not provide any detailed information on where the mill will source the required timber from, and it also does not analyse the cumulative impacts of these three mills.

Research from the Federal Institute of Paraná has identified several impacts of the monoculture plantations in the region, among which the fact that at least 40 springs have dried up and the reduced availability of land for food production.\textsuperscript{12} Furthermore, there are several indigenous lands within the proximity of the Puma mill which could be impacted by the expansion of the plantations. The company has not yet provided information about its process for seeking the Free Prior and Informed Consent (FPIC) for affected communities.

\textit{Location of the Klabin’s Telêmaco Borba mill, its Puma I mill and the planned Puma II mill. Maps from Global Forest Watch, showing accumulated tree cover loss between 2001 and 2018.}

\textbf{Is the pulp and paper sector going through difficulties and does it need development aid to survive?}

This hardly seems to be the case. Over the past decade, global pulp demand and pulp prices have risen dramatically\textsuperscript{13} and Brazilian pulp exports have boomed. In 2017 they increased by 6.8%\textsuperscript{14} and in 2018 by 31.5%.\textsuperscript{15}

In 2018, Klabin reported an adjusted EBITDA (earnings before interest, taxes, depreciation, and amortization, is a measure of a company’s overall financial performance) of BRL 4 billion (almost USD 1 billion), up 47% from 2017, when it also showed a 20% growth compared to 2016.\textsuperscript{16} In 2018 it also reduced its leverage from 4x to 3x.\textsuperscript{17} Though still high, it is similar to that of Fibria in 2017\textsuperscript{18} and it is partly the result of the large investment the company made in the Puma mill, which was inaugurated in 2016.

\textsuperscript{11} Klabin (27-3-2019), Relatório Ambiental Preliminar da ampliação da unidade Puma em Ortigueira-PR.
\textsuperscript{12} Câmara dos Deputados; 21-11-2014, Seminário no Paraná discute consequências da monocultura do eucalipto.
\textsuperscript{13} Hawkins & Wright, 2018, Market Pulp Outlook, November 2018.
\textsuperscript{14} RISI, 2017, World Pulpwood Study Outlook webinar.
\textsuperscript{15} Financial Tribute, August 2017.
\textsuperscript{16} Paper Age, February 2019.
\textsuperscript{17} Klabin (2017), Demonstrações Financeiras Completas.
\textsuperscript{18} Klabin (2018), Financial statements on December 31, 2018.
\textsuperscript{18} Klabin (2018), Resultados 3T18.
In 2017, Klabin, along with Fibria and Suzano, together Brazil’s largest pulp producers, all ranked in the top 100 of the country’s largest companies by net income. Klabin was the 73rd largest company, larger than Shell, Bayer or McDonalds in Brazil. Its competitors Fibria and Suzano (which merged in 2019) were listed as 52nd and 62nd, respectively. The technology they use is well developed, the companies are doing well, they are all listed on the stock exchange and there does not seem to be any indication of a downturn in the market. Quite on the contrary.

So, do they really need the support of development banks at “attractive conditions”? Should these banks not invest in other sectors that don’t have such high profit margins, but that are of high social value, such as water treatment, sewage systems, public transport and renewable energy, instead of subsidizing the profits of pulp and paper shareholders?

Does Klabin contribute to the region’s sustainable development?

Telêmaco Borba, also known as the “Capital of Paper”, owes its existence to Klabin. The town was formed after Klabin installed its mill in Monte Alegre in the 1940s. The mill started to attract people who came looking for a job. Not being able to stay in the company town, they settled on the opposite bank of the river, in what became Telêmaco Borba. As its population grew (today around 80,000 people), it was transformed into a separate municipality in 1964, with an area of 138,286 ha.

The rural area of the Telêmaco Borba is almost completely covered by monoculture tree plantations. According to Brazil’s statistics institute IBGE, the area covered by tree plantations (165,305 ha) is even larger than the area of the municipality itself (138,268 ha). Though there is obviously some kind of accounting error here, satellite images clearly show the strong predominance of plantations. This means that there is virtually no space for the production of any other crop, creating a high economic concentration on one single product. It also means that there is virtually no one living in rural areas. The entire population is concentrated in town.

Being Klabin the largest land owner, the main employer and the most important tax payer of the municipality, it is perhaps not surprising that there has been virtually no protest against the company when it announced the installation of the Puma mill in the neighbouring municipality of Ortigueira, and then when, a few years later, it announced its expansion with the Puma II mill.

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19 Valor (2018), Ranking 1000 maiores.
20 IBGE 2018, Áreas dos Municipio.
21 IBGE 2018, Área total existente em 31/12 dos efetivos da silvicultura, segundo a Unidade da Federação, suas Mesorregiões, Microrregiões e Municípios.
Klabin does not source only from Telêmaco Borba. As its capacity expanded, it also had to expand its plantation base. According to a report by the Forest Stewardship Council (FSC) (see note 22), which has certified Klabin’s plantations, the company already sources from 37 different municipalities. In total it had 182,000 ha of plantations in 2019, a figure which is likely to increase in the near future.

Is the installation of a pulp mill beneficial to indigenous and other traditional peoples?
The region of Telêmaco Borba used to be inhabited by a number of indigenous people, including the Kaingangs, Guaranis, Coroados, Tupis and Xetás. They had already faced several different colonization processes which had reduced their populations, when in the early XIX century, one of the region’s largest landowners, José Félix da Silva, was granted the vast area which became known as Fazenda Monte Alegre. He killed many of the remaining original indigenous inhabitants on that land and was responsible for a massacre of hundreds of ambushed Kaingangs, on Monte Alegre.²³ It is not clear how many had survived by the time Klabin arrived, but by 2016, only 138 indigenous people lived in the municipality of Telêmaco Borba, which had no officially demarcated indigenous lands.²⁴ The very few existing indigenous lands in the region are all quite small. Nowadays, many Kaingangs live in poverty and survive by selling handicrafts on the streets.

To what extent do all these municipalities benefit from the pulp mills and their plantations?
Telêmaco Borba has a Human Development Index of 0.73, which is below Brazil’s average of 0.755.²⁶ But it is still substantially higher than that of the surrounding municipalities, including Ortigueira (0.61), Sapopema (0.65), Tibagi (0.66) and Ventania (0.65).²⁷ And while the employment rate is almost 29% in Telêmaco, again, the surrounding municipalities have a much lower score, and all of

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²² Imaflora 2019, Relatório Público Telêmaco Borba.
²³ Imaflora 2019, Relatório de Certificação.
²⁵ Hidro Curiuva (2016), Relatório Ambiental Simplificado – Central Geradora Hidrelétrica Curiúva I.
them have a relatively high percentage (35-42%) of the population that lives on less than USD 120 a month (half a minimum salary).  

Though the construction of a new pulp mill creates a few thousand jobs during the construction period, these are only temporary. Once the mill is operational, it only provides jobs for a few hundred people. Klabin’s 180,000 ha of plantations only employ 3,547 people, which is equivalent to an average of 1 person per 50 ha. This calculation does not include employees of outsourced companies, so the number might be slightly higher. However, these outsourced workers generally have to work under worse labour conditions and with considerably lower salaries compared with those working directly for the company.

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28 IBGE (n.d.), Panorama de Telemaco Borba.
A study from 2011 which compared data from 1996 and 2001, found that the average worker in the pulp industry was earning less in 2001 than in 1996 (an average of 5-7 minimum salaries compared to 7-10 in 1996).  

The low employment rate may also contribute to the relatively high homicide rate of Telêmaco Borba, which in 2017 was 25 murders per 100,000 inhabitants. An improvement compared to the 2014 rate of 35, but still much higher than in surrounding municipalities.

Another map that shows some interesting statistics is one of traces of pesticides in drinking water, published by the journalistic consortium between Agência Pública and Reporté Brasil. A comprehensive study published by the same consortium maps the number of pesticides of which traces have been found in drinking water, in different municipalities in Brazil.

It shows that in Telêmaco Borba, and in all its neighbouring municipalities, all 27 tested pesticides were found in the water. Among the tested pesticides is glyphosate, of which Klabin used 128,000 liters in 2017. More research would be needed in order to make a direct link between the pesticides used in plantations and those found in water. But there is certainly a pattern of higher number of pesticides found in the drinking water, in the location of some of the country’s major pulp mills.

This study did not test the presence of sulfluramid, a “highly dangerous” pesticide according to FSC audits, used to kill ants. In 2017, Klabin reported it had used 65,000 liters of sulfluramid, and in 2018 it used 197,000 liters of “highly dangerous” pesticides, without disclosing which. Most likely this was also sulfluramid.

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30 Silva, Silva, Andreoli (2011), Local development and cellulose and paper economic activity: Klabin’s and Telêmaco Borba’s history.
31 Ipea (2019), Taxas estimadas de homicídios.
32 Por trás do Alimento (n.d.)
33 Por trás do Alimento (15-4-2019), Coquetel com 27 agrotóxicos foi achado na água.
34 Rainforest Alliance (13-7-2018), Resumo Público da avaliação de certificação do manejo florestal da Klabin.
35 Rainforest Alliance (13-7-2018), Resumo Público da avaliação de certificação do manejo florestal da Klabin.
36 Imafiora 2019, Relatorio Publico Telemaco Borba.
Apart from the apparent scarce contribution to the regional development, and the potential contribution to the presence of pesticides in drinking water, Kalbin’s eucalyptus plantations also have an impact on biodiversity and on the climate. There is scientific consensus that a natural forest holds the highest amount of carbon and of biodiversity and there is increasing scientific evidence that shows that large scale pulp-fibre plantations contribute to water scarcity and forest fires.

As the maps below show, comparison of the areas in Paraná with the highest concentrations of fiber plantations shows a certain overlap with the municipalities with the highest number of fire alerts.

Is growth in the pulp and paper sector the best way to improve a nation’s welfare?

Even though Brazil’s pulp exports have grown significantly over the past decade, from 9 million tonnes in 2010 to 15 million tonnes in 2019, it is hard to find any evidence that this has benefited the country as a whole.

On the contrary, it has caused land concentration and land use change, which causes land conflicts and indirectly stimulates deforestation by other actors, in other places. It has caused impacts on water quality and availability, among others in Bahia and Espírito Santo. This region, which was once covered by lush Mata Atlântica forests, is now covered by eucalyptus plantations and suffering from desertification. It has caused a rural exodus, as there are very few jobs to be found in the plantations, while it has also stirred social problems in the places where new mills were built, because of the influx of migrant labourers.

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38 O Globo (24-3-2016), 24 municípios do ES passam por processo de desertificação.
39 R. A. de Almeida, Territorialização complexo eucalipto-celulose-papel em Mato Grosso do Sul,
Paper certainly has many benefits for human society in education, communication, security and hygiene. EPN’s Global Paper Vision draws a future where all people have access to a fair share of the resource, without causing environmental or social harm.

UNESCO estimates that 30 kg of paper per year, per person, is the minimum required for education and for democratic involvement in society. But the average world consumption is already 55 kg/year/person and there are countries with extremely high and wasteful levels of consumption, like North America, where on average people use 215 kg per year.

Conclusions

The production of pulp and paper has significant social and environmental impacts.

However, paper also provides society with many benefits. The challenge is to produce just enough to cover everybody’s needs and to make sure that everyone has access to their fair share of paper. To avoid unnecessary impacts on natural resources, any additional pulp production should be halted.

To fight the biodiversity collapse and climate crisis that the world is facing, it is urgent for development banks and agencies, as well as governments, to finance projects that protect and restore natural forests, rather than investing in projects requiring expansion of large scale plantations.

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40 MDIC (n.d.), Estatísticas de comércio exterior.
Investments should be made in reducing consumption, reusing paper and cardboard and in recycling all fibres. This is something governments and policy driven institutions, such as development banks, should provide incentives for.

Development banks and agencies should also support initiatives that promote this and that develop sustainable alternatives, instead of investing in the business-as-usual expansion of the sector.

**Questions for further research and discussion**

**What type of projects should development banks and agencies provide loans to?**
* Should they provide loans to projects that bring sustainable development to a region, or to projects that provide sustainable profits?

**Is the sector going through difficulties and does it need development aid to survive?**
* Is there any evidence that shows that the pulp sector is in need of financial support?
* How many tax cuts and subsidies does the sector receive, and how much tax-payers money does that cost on a yearly basis?

**Does Klabin contribute to the region’s sustainable development?**
* How much would the region have developed if Klabin had not installed its mills in the region?
* How much of the pollution of air, water and soil in Paraná can be attributed to Klabin?
* Can a clear correlation be made between the occurrence of tree plantations and the intensity of fires?
* What is the role of the pulp plantations in the desertification of areas?

**Is growth in the pulp & paper the best way to improve a nation’s welfare?**
* What are Brazil’s main social, environmental and economic problems, and how does the pulp and paper sector contribute to solving these?

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